DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

08/05/2009 has been entered.

Response to Arguments

2.   Applicant's arguments filed 08/05/2009 have been fully considered but they are

not persuasive.

        Applicant argues on pages 8+ of the 08/05/2009 Remarks that neither Dougherty

et al. (U.S. Patent No. 6,725,461) nor Hasagawa (U.S. Patent No. 7,406,702) discloses

"forming the application data signal using the retrieved extracted application data" as

now recited in claims 1 and 18.

        In response to argument, Examiner respectfully disagrees. Dougherty et al.

discloses forming the application data signal using the retrieved extracted application

data in col. 7, lines 45-57: the interactive application i.e. application data is being formed

using retrieved extracted (extractor, 206) extracted interactive application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims **1, 3-8, 13, 15-16 and 18-20** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Dougherty et al. (U.S. Patent No. 6,725,461) in view of Hasegawa

(U.S. Patent No. 7,406,702).

Regarding **claims 1 and 18**, Dougherty et al. discloses an apparatus for

generating an application data signal, the apparatus comprising:

a receiver for receiving a content signal (broadcast program) comprising

embedded application data (interactive application) (see col. 2, lines 58-62);

an extraction processor for extracting the application data (interactive application)

from the content signal (broadcast data) (see col. 7, lines 46-48);

a data storage for storing the extracted application data (col. 7, lines 54-57, col.

8, lines 11-14, there are two separate storage devices in the broadcast receiver. The

first storage device 212 is for storing the extracted interactive application);

an application data generator for generating an application data signal by

retrieving the stored extracted application data (see col. 7, lines 45-57, retrieving the

stored extracted application data from the first storage device 212), and forming the

application data signal using the retrieved extracted application data (see col. 7, lines

45-57: the interactive application i.e. application data is being formed using retrieved

extracted (extractor, 206) extracted interactive application).

However, Dougherty et al. fails to specifically disclose the second storage device

is for storing content signal.

Hasegawa discloses the second storage device is for storing content signal (see

fig 6 (410), col. 4, lines 32-33, 50-52).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to modify the system of Dougherty et al. to include the

second storage device is for storing content signal as taught by Hasegawa for the

advantage of storing the identifier as directory information on the content storage device

410.

Regarding **claim 3**, Dougherty et al. and Hasegawa discloses everything claimed

as applied above (*see claim 1*). Dougherty et al. discloses the apparatus wherein the

content signal (program) is a video signal (see col. 3, lines 59-col. 4, line 25,

broadcasting is the distribution of video and/or audio signals which transmit program

contents to audience).

Regarding **claim 4**, Dougherty et al. and Hasegawa discloses everything claimed

as applied above (*see claim 1*). Dougherty et al. discloses the apparatus wherein the

content signal (program) is an audio signal (see col. 3, lines 59-col. 4, line 25,

broadcasting is the distribution of video and/or audio signals which transmit program

contents to audience).

Regarding **claim 5**, Dougherty et al. and Hasegawa discloses everything claimed

as applied above (*see claim 1*). Dougherty et al. discloses the apparatus wherein the

content signal is an MPEG 2 encoded content signal (see col. 6, lines 26-39).

Regarding **claim 6**, Dougherty et al. and Hasegawa discloses everything claimed

as applied above (*see claim 1*). Dougherty et al. discloses the apparatus wherein the

content signal is an interactive audiovisual signal (see col. 2, lines 49-52) and the

application data is interactive application data (see col. 2, lines 53-58).

Regarding **claim 7**, Dougherty et al. and Hasegawa discloses everything claimed

as applied above (*see claim 6*). Dougherty et al. discloses the apparatus wherein the

interactive audiovisual signal is a broadcast interactive TV signal (see col. 6, lines 1-8).

Regarding **claim 8**, Dougherty et al. and Hasegawa discloses everything claimed

as applied above (*see claim 1*). Dougherty et al. discloses the apparatus wherein the

extraction processor (206) comprises means for storing the application data (212) and

content data of the content signal (214) separately in the data storage (see col. 7, lines

51-57).

Regarding **claim 13**, Dougherty et al. and Hasegawa discloses everything

claimed as applied above (*see claim 1*). Dougherty et al. discloses the apparatus

wherein the extraction processor removes at least some of the application data from the

content signal (see col. 7, lines 46-53).

Regarding **claim 15**, Dougherty et al. and Hasegawa discloses everything

claimed as applied above (*see claim 1*). Dougherty et al. discloses an apparatus as

claimed is interactive TV data (see col. 1, lines 30-40).

Regarding **claim 16**, Dougherty et al. and Hasegawa discloses everything

claimed as applied above (*see claim 1*). Dougherty et al. discloses the apparatus

wherein the extraction processor stores the content signal and the application data in

the data storage according to different storage protocols (see col. 7, lines 54-67).

Regarding **claim 20**, Dougherty et al. and Hasegawa discloses everything

claimed as applied above (*see claim 18*). Dougherty et al. discloses a computer

readable medium having a computer program stored thereon, said computer program,

when loaded on a computer, causing the computer to execute the steps of the method

as claimed above (see fig 2 and col. 4, lines 28-43).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 9-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Dougherty et al. (U.S. Patent No. 6,725,461) and Hasegawa (U.S. Patent No.

7,406,702) as applied to *claim 1* above, and further in view of Pierre et al. (U.S. Patent

No. 7,000,245).

Regarding **claim 9**, Dougherty et al. and Hasegawa discloses everything claimed

as applied above (see claim 1). Dougherty discloses extraction processor (see fig 2

(206)).

However, Dougherty et al. and Hasegawa fail to specifically disclose to modify an

application data indication of the content signal.

Pierre et al. discloses modifying an application data indication of the content

signal (see col. 7, lines 61-col. 8, line 6).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to modify the system of Dougherty et al. and

Hasegawa to include modifying an application data indication of the content signal as

taught by Pierre et al. for the advantage of reducing the delay associated with the

application data.

Regarding **claim 10**, Dougherty et al., Hasegawa and Pierre et al. discloses everything claimed as applied above (*see claim 9*). Dougherty discloses extraction processor (see fig 2 (206)).

Pierre et al. discloses an apparatus to modify the application data indication of the content signal by removing a data indication related to application data that has been removed from the content signal (see col. 6, lines 7-29).

Regarding **claim 11**, Dougherty et al., Hasegawa and Pierre et al. discloses everything claimed as applied above (*see claim 9*). Dougherty discloses extraction processor (see fig 2 (206)).

Pierre et al. discloses an apparatus to modify the application data indication of the content signal be associated with the application data stored in the data storage (see col. 2, lines 63-67).

5.   **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty et al. (U.S. Patent No. 6,725,461), Hasegawa (U.S. Patent No. 7,406,702) and Pierre et al. (U.S. Patent No. 7, 000,245) as applied to *claim 11* above, and further in view of Smiley et al. (U.S. Publication No. 2002/0144291).

Regarding **claim 12**, Dougherty et al., Hasegawa and Pierre et al. discloses everything claimed as applied above (see claim 11). Dougherty discloses extraction processor (see fig 2 (206)).

Pierre et al. discloses to specifically disclose to modify an application data

indication of the content signal (see col. 7, lines 61-col. 8, line 6).

However, Dougherty et al. and Pierre et al. fail to specifically disclose a network

server identity through which the application data signal can be accessed.

Smiley et al. discloses a network server identity through which the application

data signal can be accessed (see paragraphs 0014 and 0017).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to modify the system of Dougherty et al., Hasegawa

and Pierre et al. to include a network server identity through which the application data

signal can be accessed as taught by Smiley et al. for the advantage of allowing a

simpler and less costly device.

6.   **Claims 2 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Dougherty et al. (U.S. Patent No. 6,725,461), Hasegawa (U.S. Patent No.

7,406,702) as applied to *claim 1* above, and further in view of Rodriguez et al. (U.S.

Patent No. 7,373,650).

Regarding **claim 2**, Dougherty et al. and Hasegawa discloses everything claimed

as applied above (*see claim 1*). Dougherty et al. discloses extracting the interactive

content from the application data (see col. 7, lines 46-48).

However, Dougherty et al. fails to specifically disclose different transmission

rates.

Rodriguez et al. discloses different transmission rates (see col. 24, lines 35-38).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Dougherty et al. and Hasegawa to include different transmission rates as taught by Rodriguez et al. for the advantage of displaying data at a faster rate.

Regarding **claim 17**, Dougherty et al. and Hasegawa discloses everything claimed as applied above (*see claim 1*). Dougherty et al. discloses communication element for communicating the application data signal and the content signal (see col. 8, lines 44-62). However, Dougherty et al. fails to specifically disclose different communication protocols.

Rodriguez et al. discloses different communication protocols (see col. 8, lines 62-col. 9, line 17).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Dougherty et al. and Hasegawa to include different communication protocols as taught by Rodriguez et al. for the advantage of having improved performance.

7.   **Claims 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty et al. (U.S. Patent No. 6,725,461), Hasegawa (U.S. Patent No. 7,406,702) as applied to *claim 1* above, and further in view of Allen (U.S. Patent No. 6,529,233).

Regarding **claim 14**, Dougherty et al. and Hasegawa discloses everything claimed as applied above (*see claim 1*).

However, Dougherty et al. fails to specifically disclose an apparatus wherein the apparatus is a digital recording device.

Allen discloses an apparatus wherein the apparatus is a digital recording device (see col. 2, lines 19-28).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Dougherty et al. and Hasegawa to include an apparatus wherein the apparatus is a digital recording device as taught by Allen et al. for the advantage of having more recording space.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NNENNA N. EKPO whose telephone number is (571)270-1663. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nnenna N. Ekpo/
Patent Examiner
October 23, 2009.

 /Brian T. Pendleton/

Supervisory Patent Examiner, Art Unit 2425